

Behringer CX3400

Behringer CX3400 V2 High-Precision Stereo Crossover

User Manual

1. INTRODUCTION

The Behringer CX3400 V2 is a professional high-precision stereo 2-way/3-way/mono 4-way crossover designed for optimal loudspeaker protection and precise audio system control. This manual provides essential information for setting up, operating, and maintaining your unit.

Key Features:

- **Professional Stereo Crossover:** Configurable as stereo 2-way, stereo 3-way, or mono 4-way.
- **Linkwitz-Riley Filters:** Features state-of-the-art 24 dB/octave Linkwitz-Riley filters for precise frequency separation.
- **Individual Limiters:** Each output includes an independent limiter for optimal loudspeaker protection against overload.
- **Adjustable Time Delay:** Allows for phase alignment between drivers, enhancing sound coherence.
- **CD Horn Equalization:** Provides compensation for constant directivity horns.
- **Flat Summed Amplitude Response:** Ensures an absolutely flat summed amplitude response with zero phase difference.

2. UNBOXING AND INITIAL INSPECTION

Upon opening the package, carefully remove the unit and verify that all components are present. The box should contain the CX3400 V2 unit, a power cable, and a quick start guide.



Image of the Behringer CX3400 V2 unit, showcasing its front panel controls and rack-mountable design.

Inspect the unit for any signs of damage that may have occurred during shipping. If you find any damage or missing parts, contact your dealer immediately.

3. SETUP AND CONNECTIONS

3.1. Power Connection

Connect the supplied power cable to the AC INPUT on the rear panel of the CX3400 V2. Then, plug the other end of the power cable into a suitable grounded AC power outlet. Ensure the power source matches the voltage requirements specified on the unit.

3.2. Audio Connections

The CX3400 V2 offers flexible input and output options for various audio system configurations. All audio connections are via 1/4-inch TRS or XLR connectors (depending on the specific model and connection point).

Input Configuration

The unit supports stereo 2-way, stereo 3-way, or mono 4-way operation. Select the desired mode using the switches on the rear panel. Connect your audio source (e.g., main mixer output) to the **MAIN INPUT (L/R)** jacks.

Output Configuration

Connect the **LOW**, **MID** (if applicable for 3-way operation), and **HIGH** outputs to the respective inputs of your power amplifiers or active loudspeakers. Ensure correct channel assignment (Left/Right) for stereo operation.

Chaining Multiple Units

For systems requiring more channels or complex routing, multiple CX3400 V2 units can be chained. Connect the **MAIN OUT** of one unit to an input channel of another unit. Be aware that chaining this way will utilize one input channel on the second unit for the chained signal, effectively reducing the available independent input channels on the second unit.

The rear panel of the CX3400 V2 features the AC input, MAIN OUT (L/R), MAIN IN (L/R), and dedicated outputs for LOW, MID, and HIGH frequencies for each channel. Switches are provided for selecting operating mode (2-way/3-way stereo, 4-way mono), input gain, and CD horn equalization.

4. OPERATING CONTROLS

4.1. Front Panel Controls

The front panel provides access to all essential controls for frequency division, level adjustment, and limiter settings.

- **Crossover Frequency Controls:** Rotary knobs allow precise adjustment of the crossover points between low, mid, and high frequencies for each channel.
- **Output Level Controls:** Independent rotary controls for adjusting the output level of each frequency band (LOW, MID, HIGH) to match your power amplifiers.
- **Limiter Controls:** Set the threshold for the built-in limiters to protect your loudspeakers from over-excursion and thermal damage. LEDs indicate when the limiter is active.
- **Phase Invert Switches:** Toggle switches allow for 180-degree phase correction of individual outputs, crucial for proper driver alignment.
- **CD Horn Equalization Switch:** Engages a specialized equalization curve for constant directivity horn compensation, improving frequency response.
- **Time Delay Controls:** Rotary controls for adjusting the time alignment between drivers, ensuring all sound waves arrive at the listener's ear simultaneously for optimal phase coherence.

4.2. Rear Panel Switches

Switches on the rear panel configure the overall operation of the unit.

- **Operating Mode Switch:** Selects between Stereo 2-Way, Stereo 3-Way, or Mono 4-Way operation, depending on your

loudspeaker system.

- **Input Gain Switch:** Adjusts the input sensitivity to accommodate different source levels.

5. MAINTENANCE

To ensure the longevity and optimal performance of your CX3400 V2, follow these maintenance guidelines:

- **Cleaning:** Keep the unit clean and free from dust. Use a dry, soft, lint-free cloth for cleaning. Avoid abrasive cleaners or solvents.
- **Environment:** Avoid exposing the unit to moisture, direct sunlight, or extreme temperatures. Ensure proper ventilation, especially when rack-mounting, to prevent overheating.
- **Power Disconnection:** Always disconnect the power cable before cleaning or performing any maintenance.
- **Cable Inspection:** Periodically check all audio and power cables for wear or damage. Replace any faulty cables immediately.

6. TROUBLESHOOTING

If you encounter issues with your CX3400 V2, refer to the following common troubleshooting steps:

6.1. No Sound Output

- **Check Connections:** Ensure all audio cables are securely connected to the correct input and output jacks.
- **Power Supply:** Verify that the unit is powered on and receiving power. Check the power cable connection and the power outlet.
- **Level Settings:** Confirm that input and output level controls on the CX3400 V2 and connected devices (mixer, amplifiers) are not set to minimum.
- **Operating Mode:** Ensure the correct operating mode (2-way, 3-way, 4-way) is selected on the rear panel.

6.2. Distorted Audio

- **Reduce Levels:** Lower the input or output levels to prevent clipping. Check the signal LEDs for excessive levels.
- **Faulty Cables:** Test with different audio cables to rule out cable issues.
- **Limiter Threshold:** Ensure the limiters are not constantly engaged at a very low threshold, which can cause compression or distortion.

6.3. Hum or Noise

- **Ground Loops:** Check for ground loops in your audio system. Try connecting all equipment to the same power strip or using a ground lift adapter (use with caution).
- **Shielded Cables:** Ensure all audio cables are properly shielded.
- **Power Connections:** Verify all power connections are secure and away from audio cables to minimize interference.

7. SPECIFICATIONS

Feature	Specification
Brand	Behringer
Model Number	CX3400

Item Weight	0.01 ounces
Product Dimensions	19.02 x 5.79 x 1.73 inches
Color	Black, Silver
Signal Format	Analog
Date First Available	November 6, 2018

8. WARRANTY AND SUPPORT

For detailed warranty information, technical support, and service inquiries, please refer to the official Behringer website or contact your local authorized distributor. It is recommended to keep your proof of purchase (receipt or invoice) for any warranty claims. You can find additional resources and contact information on the Behringer website: www.behringer.com

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question